	Application No.	Applicant(s)
Notice of Allowability	10/662,293	DOYON ET AL.
	Examiner	Art Unit	
	KIMBLEANN VERDI	2196	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *9/7/2011*.

2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

3. ☒ The allowed claim(s) is/are *1-8 and 11-14 now renumbered as 1-12*.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

        Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☒ Interview Summary (PTO-413), Paper No./Mail Date *20110927* .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

/Emerson C Puente/
Supervisory Patent Examiner, Art Unit 2196

EXAMINER'S AMENDMENT

1.   An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided

by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be

submitted no later than the payment of the issue fee.

2.   Authorization for this examiner's amendment was given in a telephone interview

with Alexandra Daoud (Reg. No. 55,992) on September 27, 2011.

3.   Amend the claims as follows:

1. (Currently Amended) In a computer system, a method for providing improved real

time command execution in a non real time operating system, comprising:

        executing at least one application at a user mode level of the non real time

operating system running on at least one Central Processing Unit (CPU);

        having said at least one application at said user mode level determine a

sequence to be followed for a set of commands;

        providing from said at least one application said sequence of commands to a

<u>software command dispatcher operating in</u> privileged mode of said non real time

operating system<u>, said sequence of commands</u> to be executed in real time;

storing commands of said sequence of commands, using the software command

dispatcher, in a command queue to be accessible from the privileged mode of said non

real time operating system;

accessing the command queue from [[a]] the software command dispatcher

operating in the privileged mode of the non real time and selecting the commands

therefrom: and

initiating one at a time, from the privileged mode of said non real time

operating system and using the at least one CPU and the software command

dispatcher, real time execution of each of said commands.

2. (Previously Presented) The method as claimed in claim 1, wherein a plurality of

sequences of asynchronous commands is provided, each sequence of the plurality of

sequences being related to a corresponding application thread, further wherein said

storing commands is performed in a corresponding queue from the execution of said

corresponding application thread.

3. (Original) The method as claimed in claim 1, wherein a synchronous command is

added to said sequence of commands, said at least one application sleeping until

said synchronous command is executed.

4. (Previously Presented) The method as claimed in claim 2, wherein a synchronous

command is added to said plurality of sequences of asynchronous commands, said

corresponding application thread sleeping until said synchronous command is

executed.

5. (Previously Presented) The method as claimed in claim 1, wherein said storing is

performed through execution of a driver routine.

6. (Original) The method as claimed in claim 5, wherein said providing said sequence

of commands involves said commands being pushed one at a time through a system

call.

7. (Previously Presented) The method as claimed in claim 1, wherein at least one of

said commands stored in the command queue is a branch command to control an order

of execution of said commands.

8. (Currently Amended) The method as claimed in claim 1, wherein said initiating, one

at a time, real time execution of said commands is done at an Interrupt Service Routine

level of the privileged mode <u>of the non real time operating system</u>.

9. (Cancelled)

10. (Cancelled)

11. (Original) The method as claimed in claim 1, wherein said sequence of commands

process a same data set.

12. (Original) The method as claimed in claim 11, wherein said same data set is a video

camera image being captured and processed in real time.

13. (Original) The method as claimed in claim 1, wherein said providing said sequence

of commands involves said commands being pushed one at a time through a system

call.

14. (Previously Presented) The method as claimed in claim 1, wherein said storing said

commands is performed through execution of a driver routine from a system file.

REASONS FOR ALLOWANCE

4.   The following is a statement of reasons for the indication of allowable subject

matter:

        The primary reason for the allowance of the Claims 1 is the inclusion of the

limitation,

        "providing from said at least one application said sequence of commands to a

software command dispatcher operating in privileged mode of said non real time

operating system, said sequence of commands to be executed in real time; storing

commands of said sequence of commands, using the software command dispatcher, in

a command queue to be accessible from the privileged mode of said non real time

operating system; accessing the command queue from the software command

dispatcher operating in the privileged mode of the non real time and selecting the

commands therefrom: and initiating one at a time, from the privileged mode of said non

real time operating system and using the at least one CPU and the software command

dispatcher, real time execution of each of said commands" in conjunction with the rest

of the limitations set forth in the claim.

Claims 2-8 and 11-14 depending on claim 1, therefore, are considered allowable

on the basis of claims 1, 13, and 20 as well as for the further limitations set forth.

5.   Any comments considered necessary by applicant must be submitted no later

than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on

Statement of Reasons for Allowance."

CONCLUSION

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to KimbleAnn Verdi whose telephone number is (571)270-

1654. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm EST.

7.   If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Emerson Puente can be reached on (571) 272-3652. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

8.   Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

September 27, 2011

KV

/Emerson C Puente/
Supervisory Patent Examiner, Art Unit 2196